Fig. 1

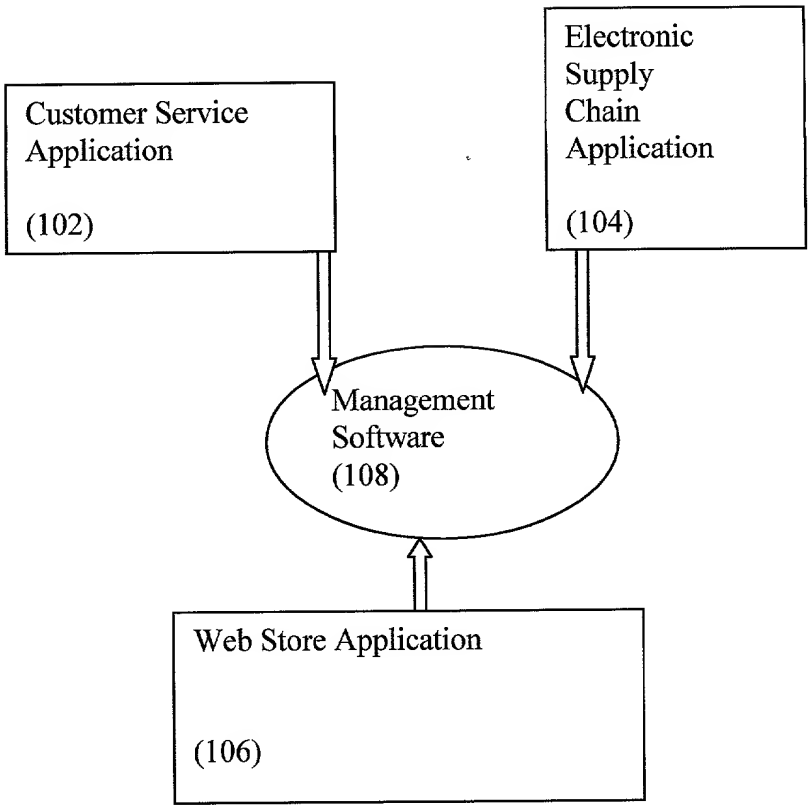

Customer Service Application
(102)
Electronic Supply Chain Application
(104)
Management Software
(108)
Web Store Application
(106)

Fig. 2

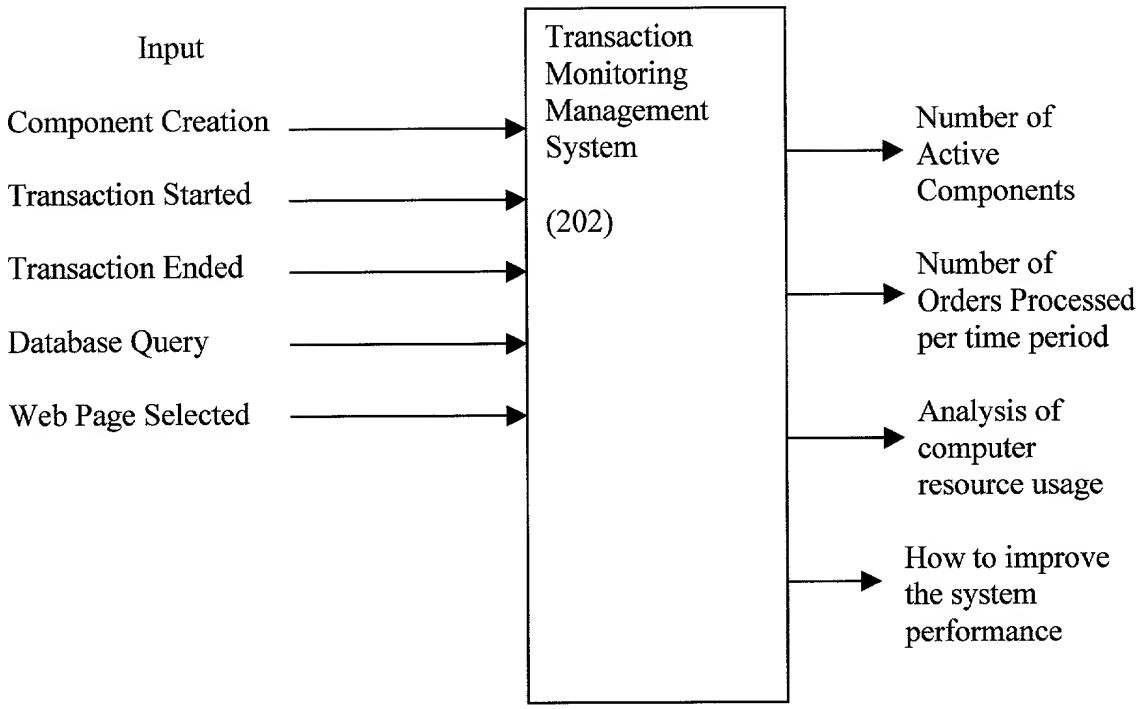

Input
Component Creation
Transaction Started
Transaction Ended
Database Query
Web Page Selected
Transaction Monitoring Management System
(202)
Number of Active Components
Number of Orders Processed per time period
Analysis of computer resource usage
How to improve the system performance

Fig. 2B

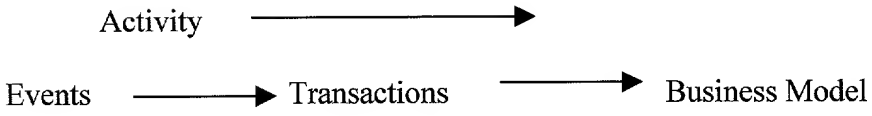

Activity
Events
Transactions
Business Model

Figure 3: Transaction Object Environment

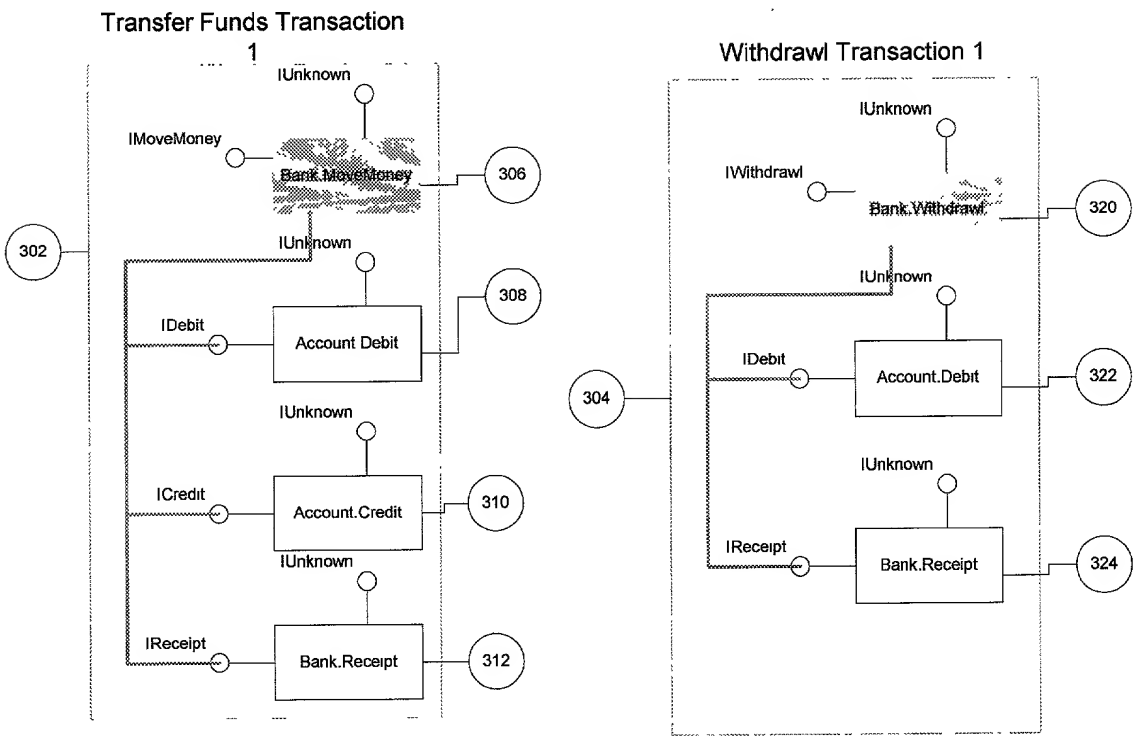
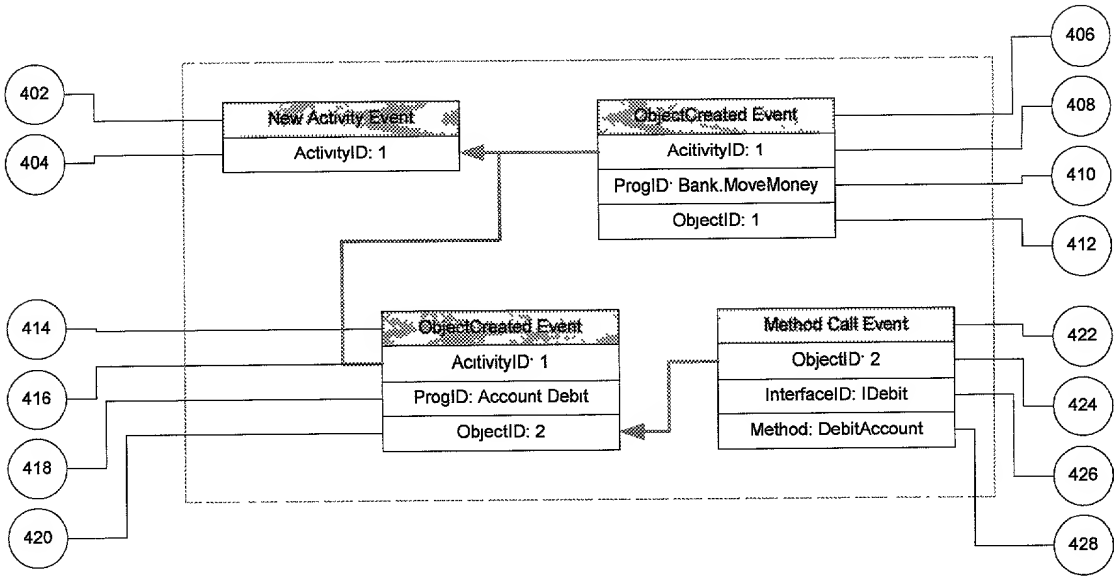
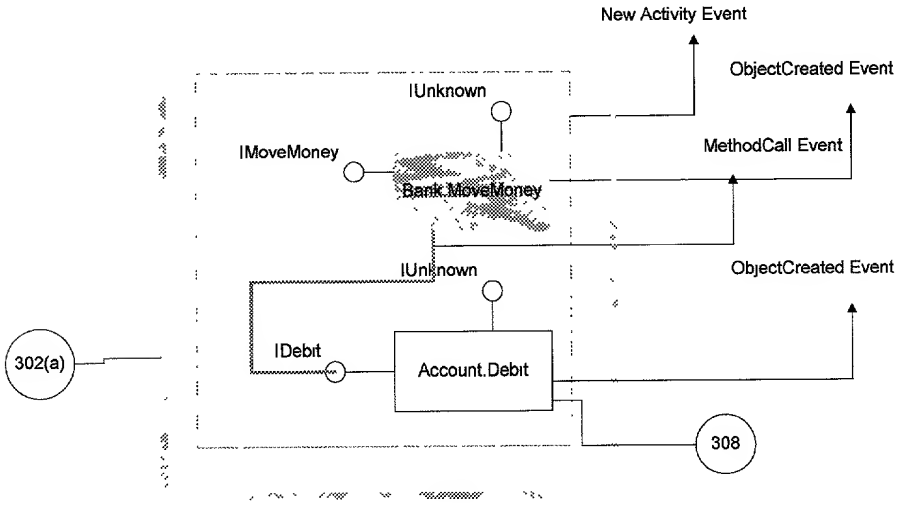
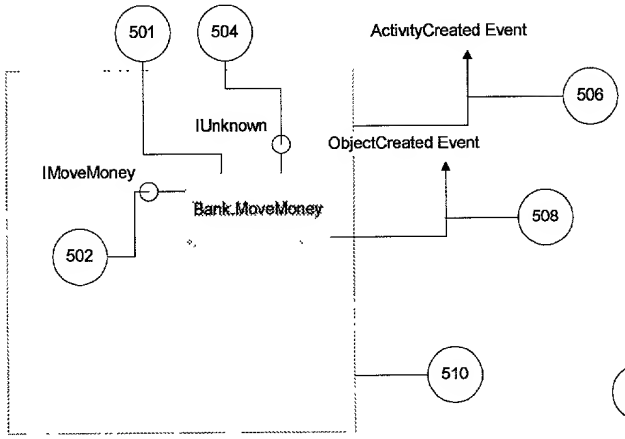


Figure 4: Correlation of Transaction Object Events

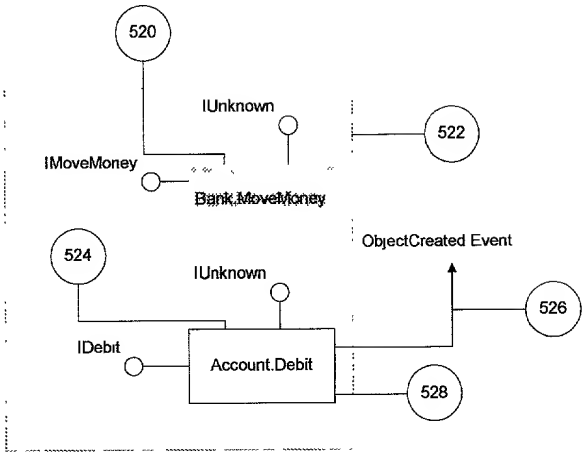




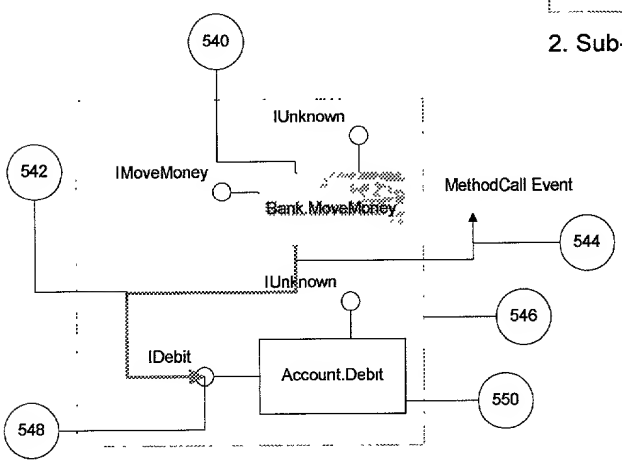
Examples of Transaction Object Events - FIG 5



1. Transaction Creation



2. Sub-Component Creation



3. Method Invocation

Figure 6: Collection of Transaction Object Events

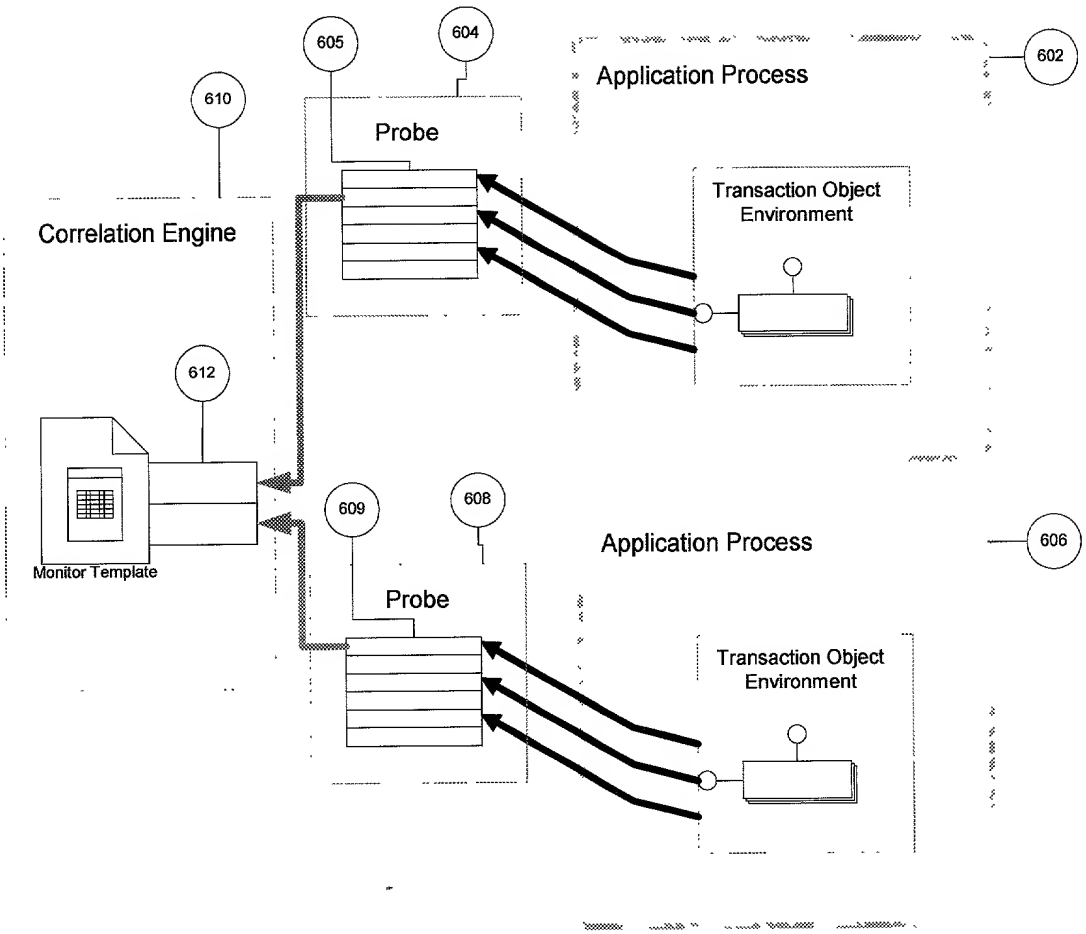


Figure 7: Probe-Correlation Architecture

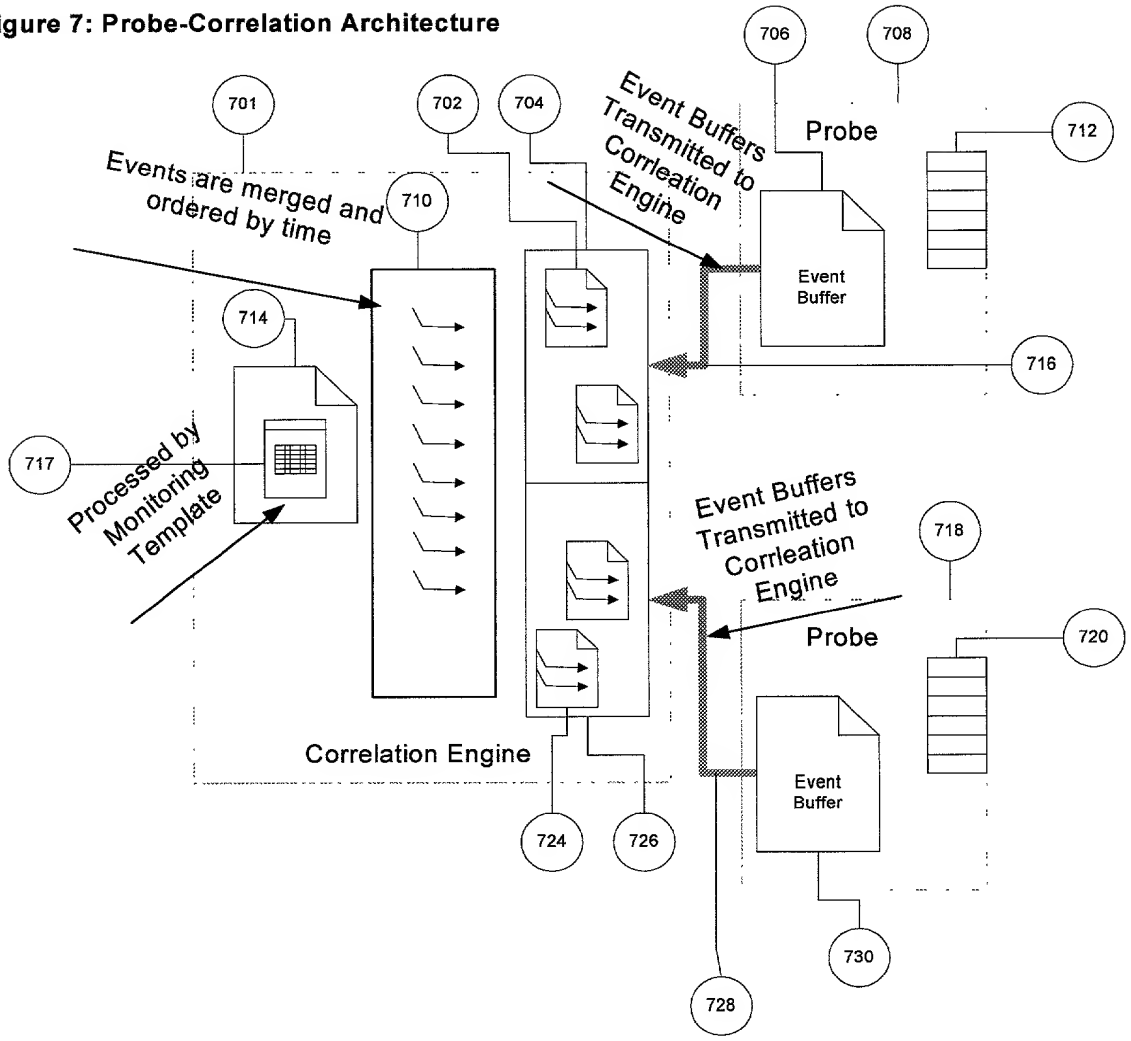


Figure 8: Probe Architecture

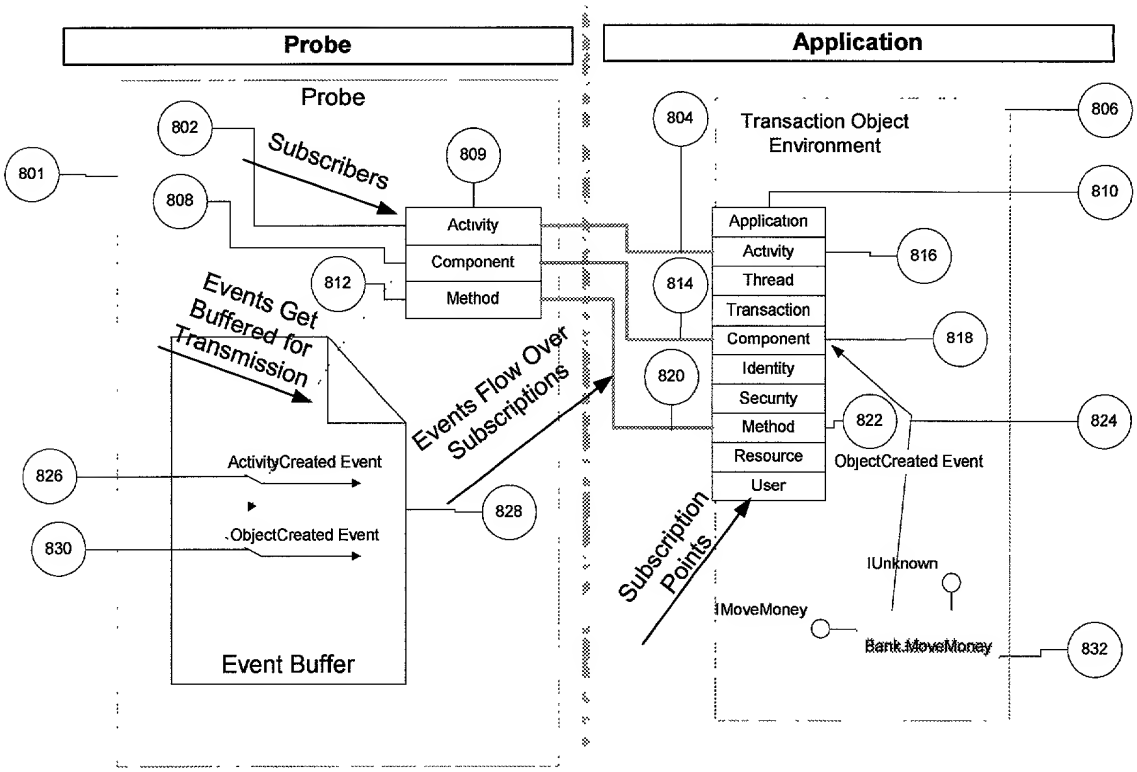


Figure 9: Correlating Transaction Throughput to System Throughput

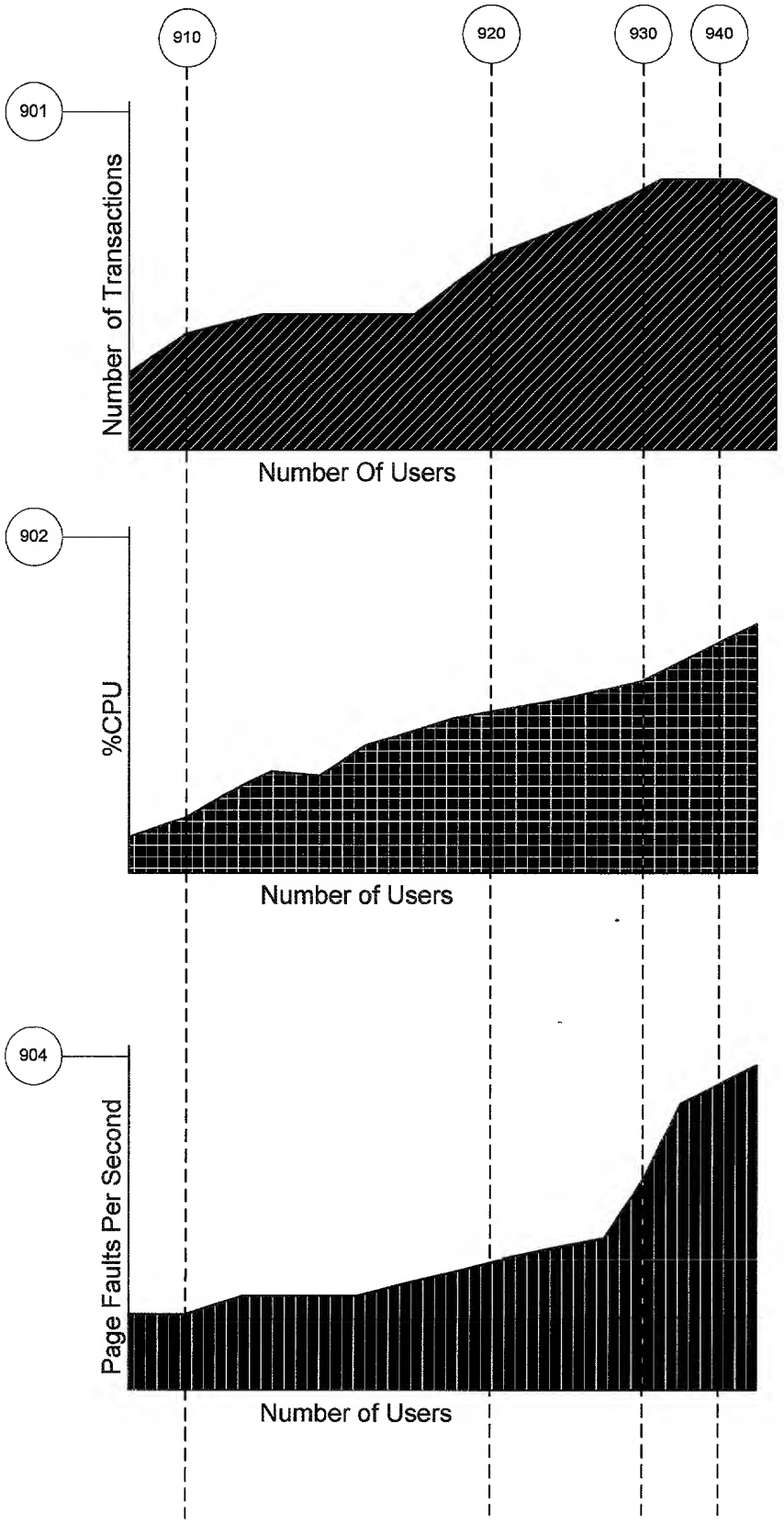


Figure 10: Algorithm for Name Construction

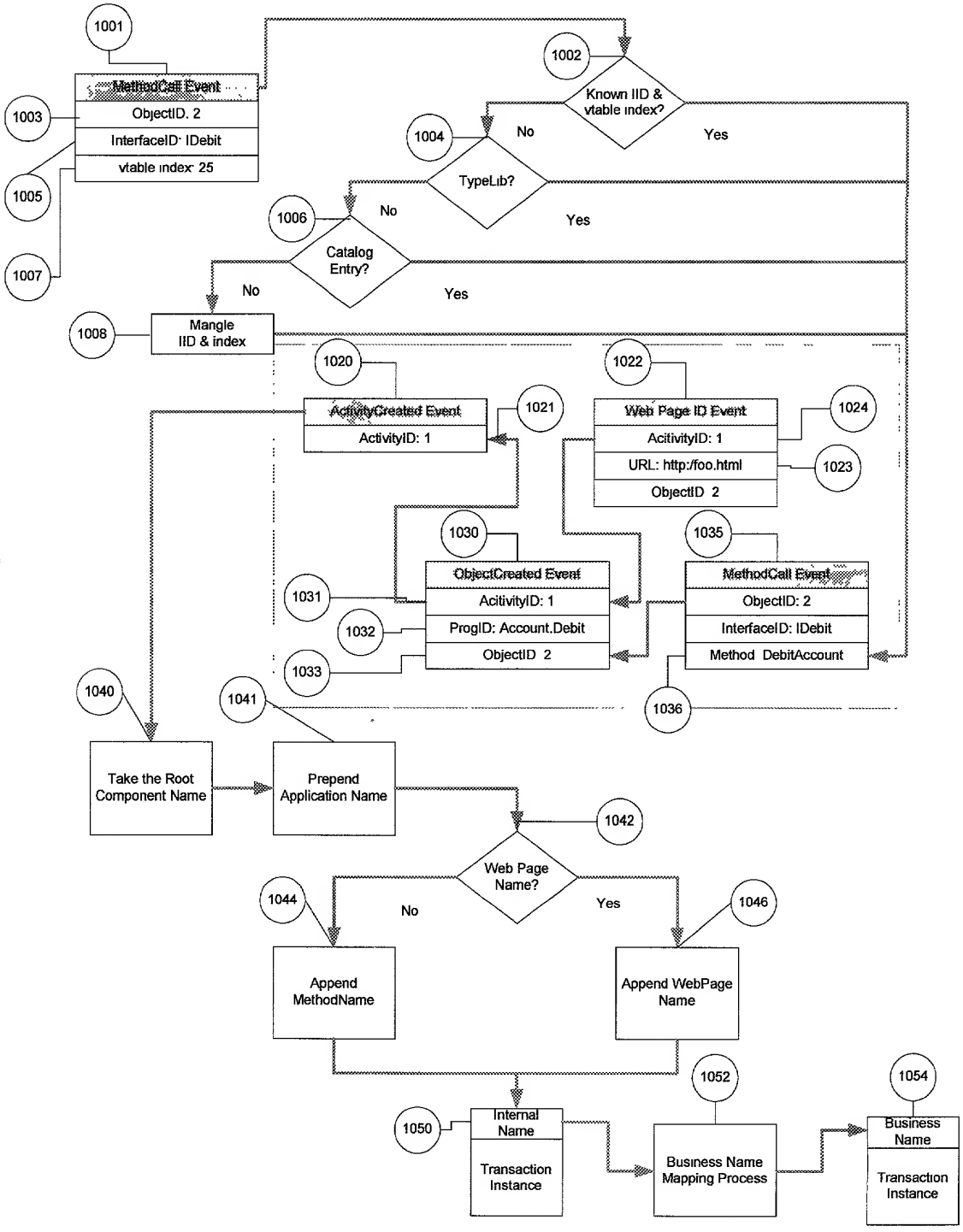


Figure 11:The Event Factory

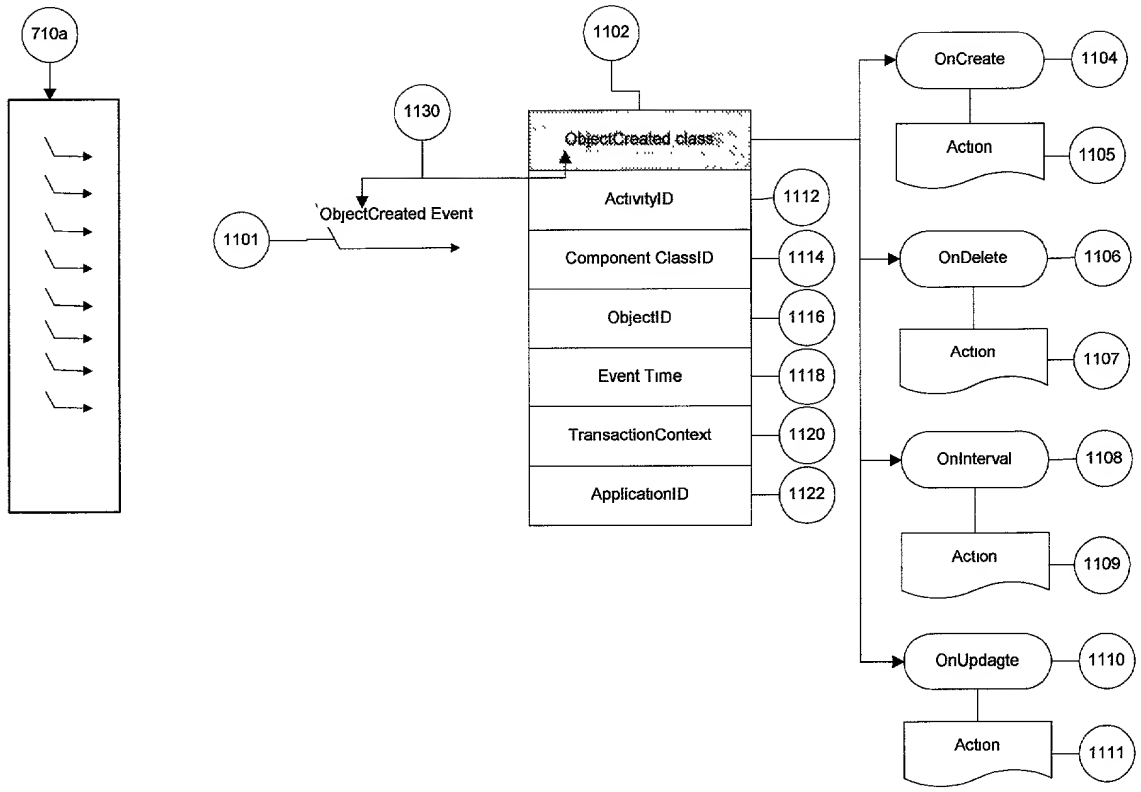


Figure 12: Algorithm for Application and Process Metrics - Application Startup

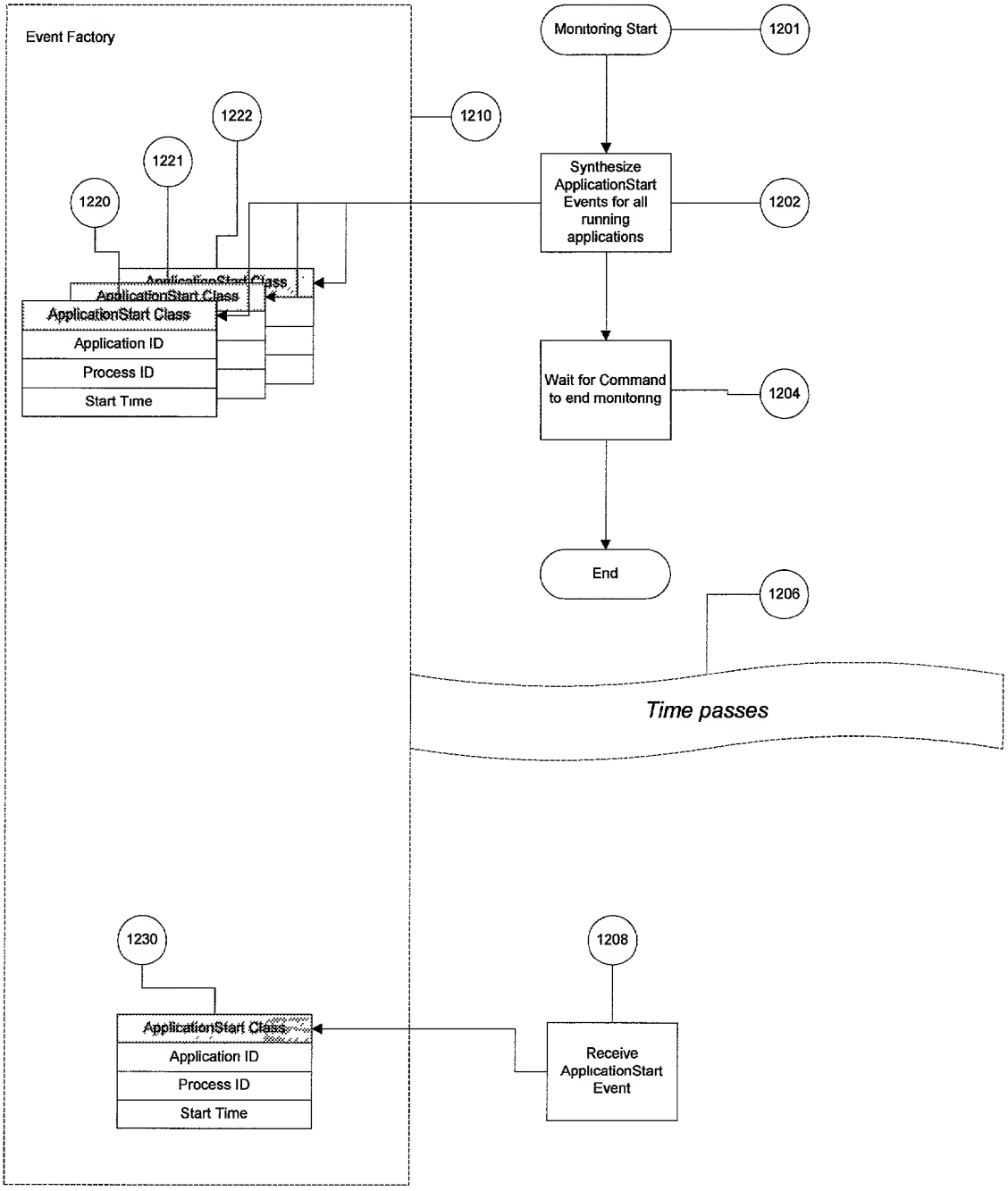


Figure 13: Algorithm for Application and Process Metrics

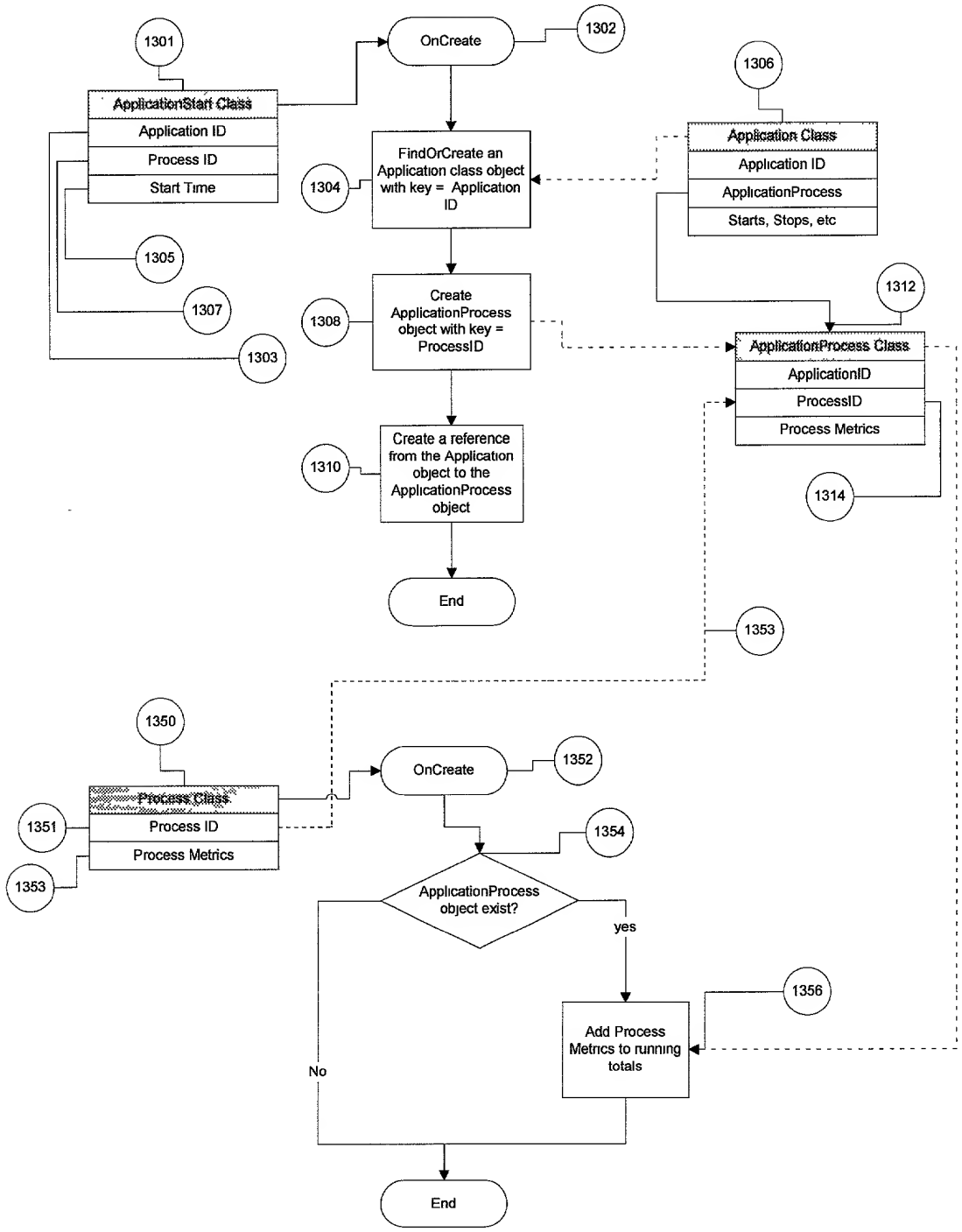


Figure 14: Algorithm for Establishing Activity Context

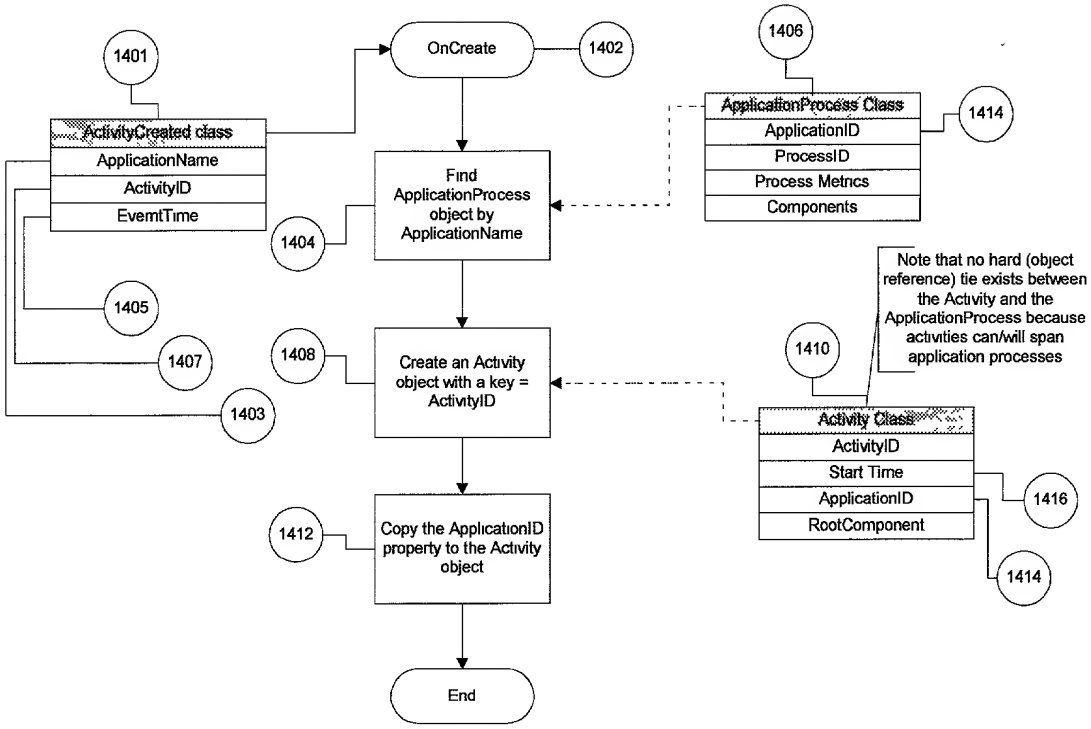


Figure 15: Algorithm for Object Creation Metrics

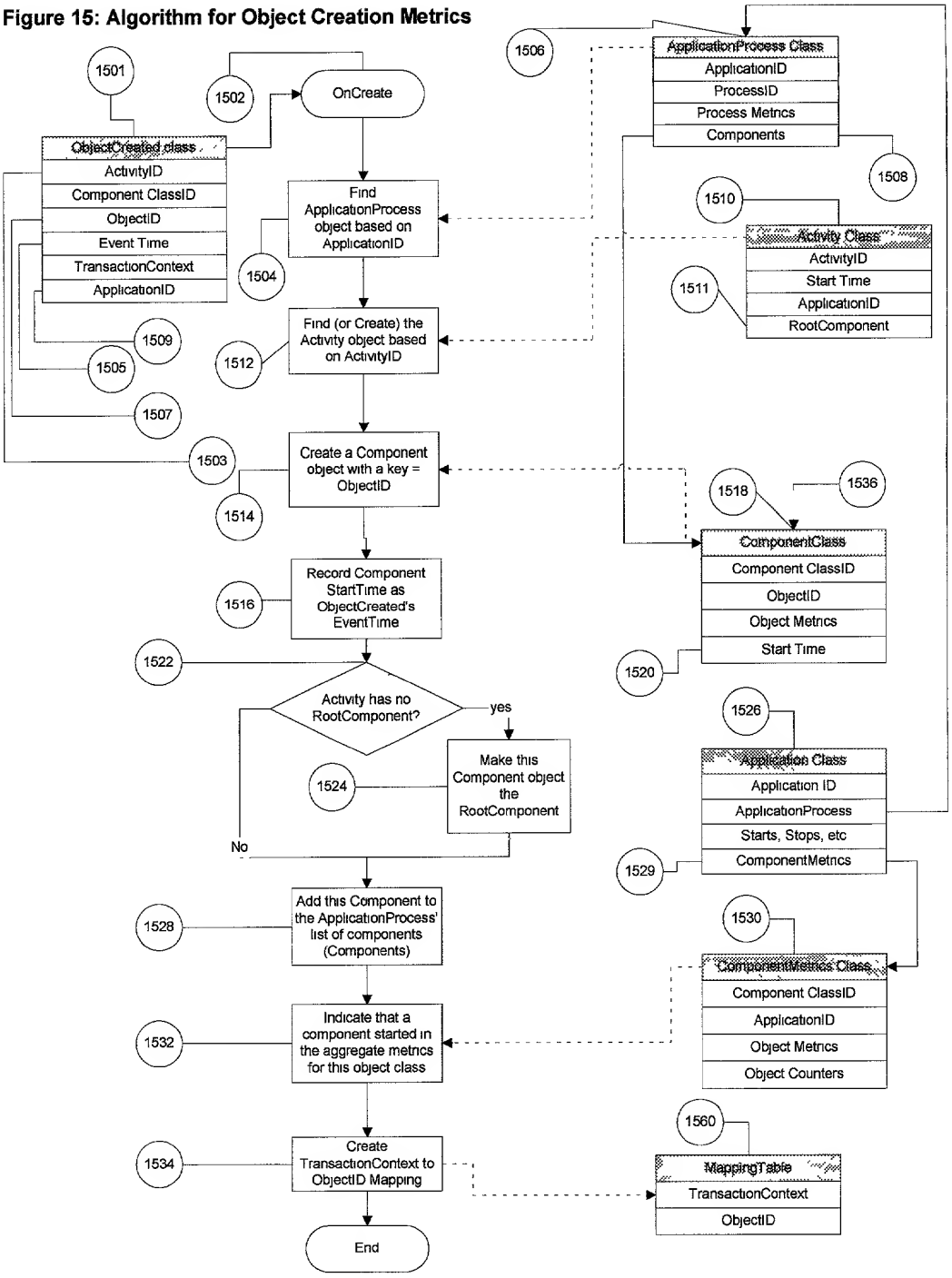


Figure 16: Algorithm for Component Activation

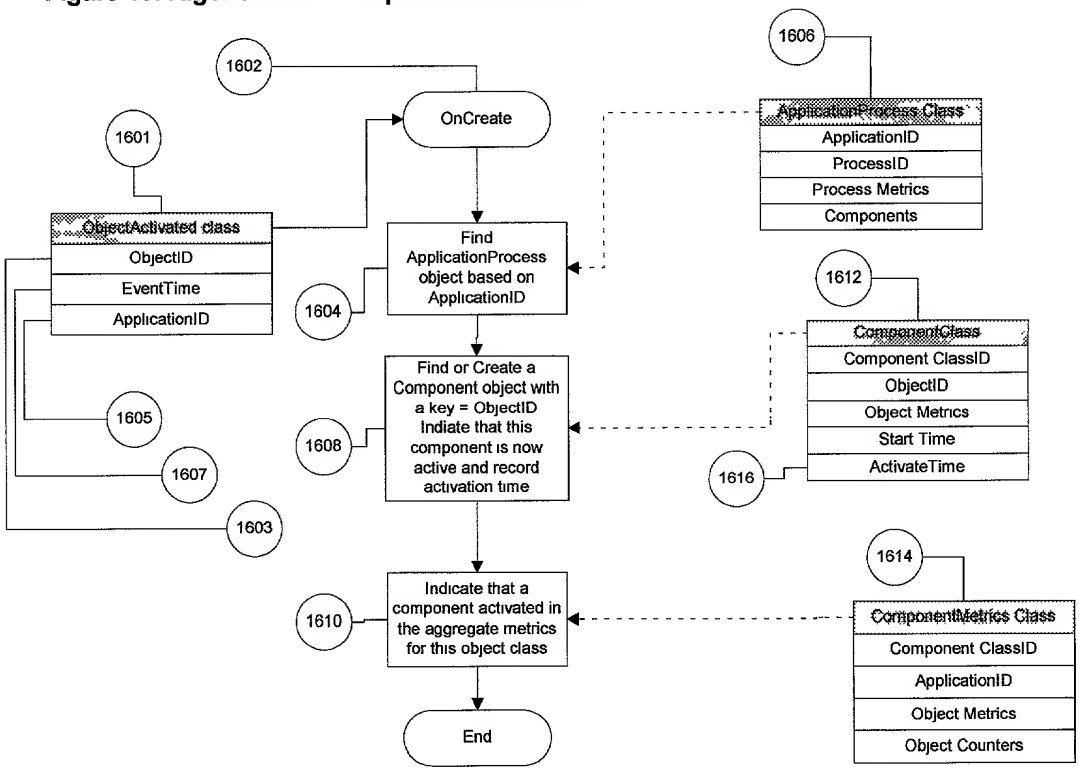


Figure 17: Algorithm for Method Call

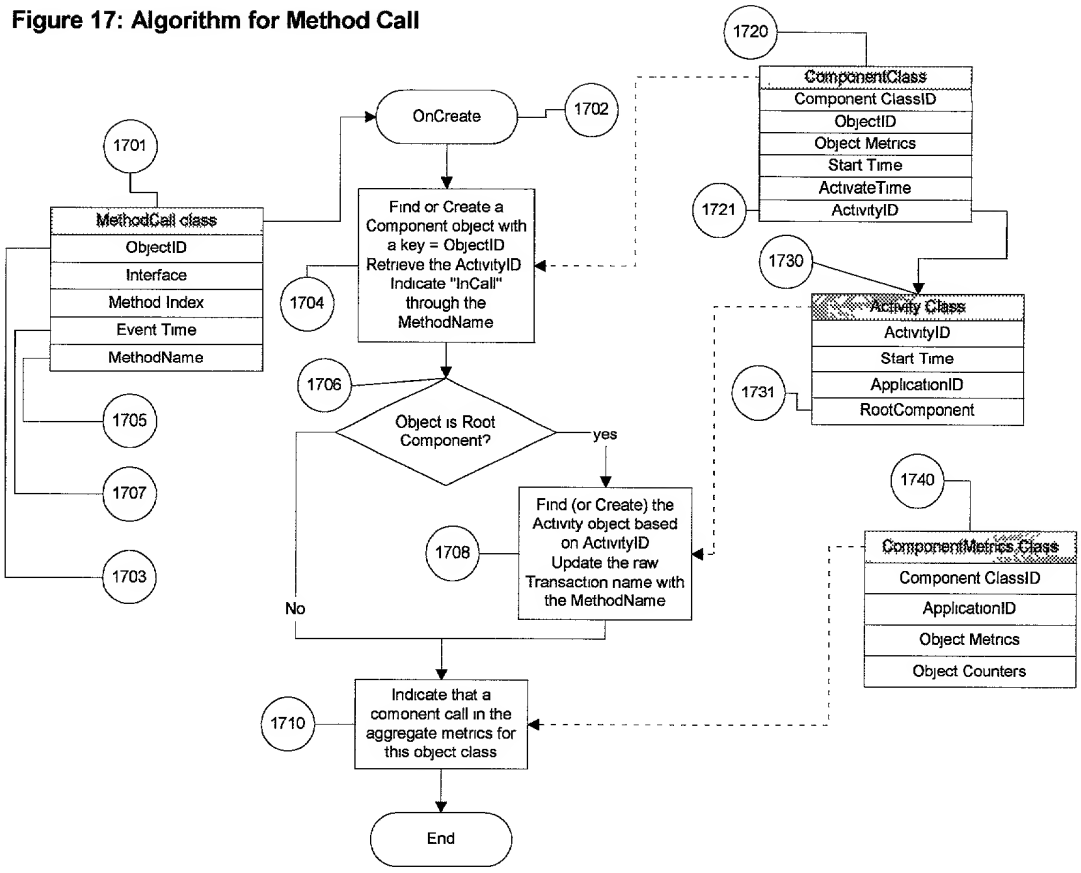


Figure 18: Algorithm for Coordinated Transaction Handling

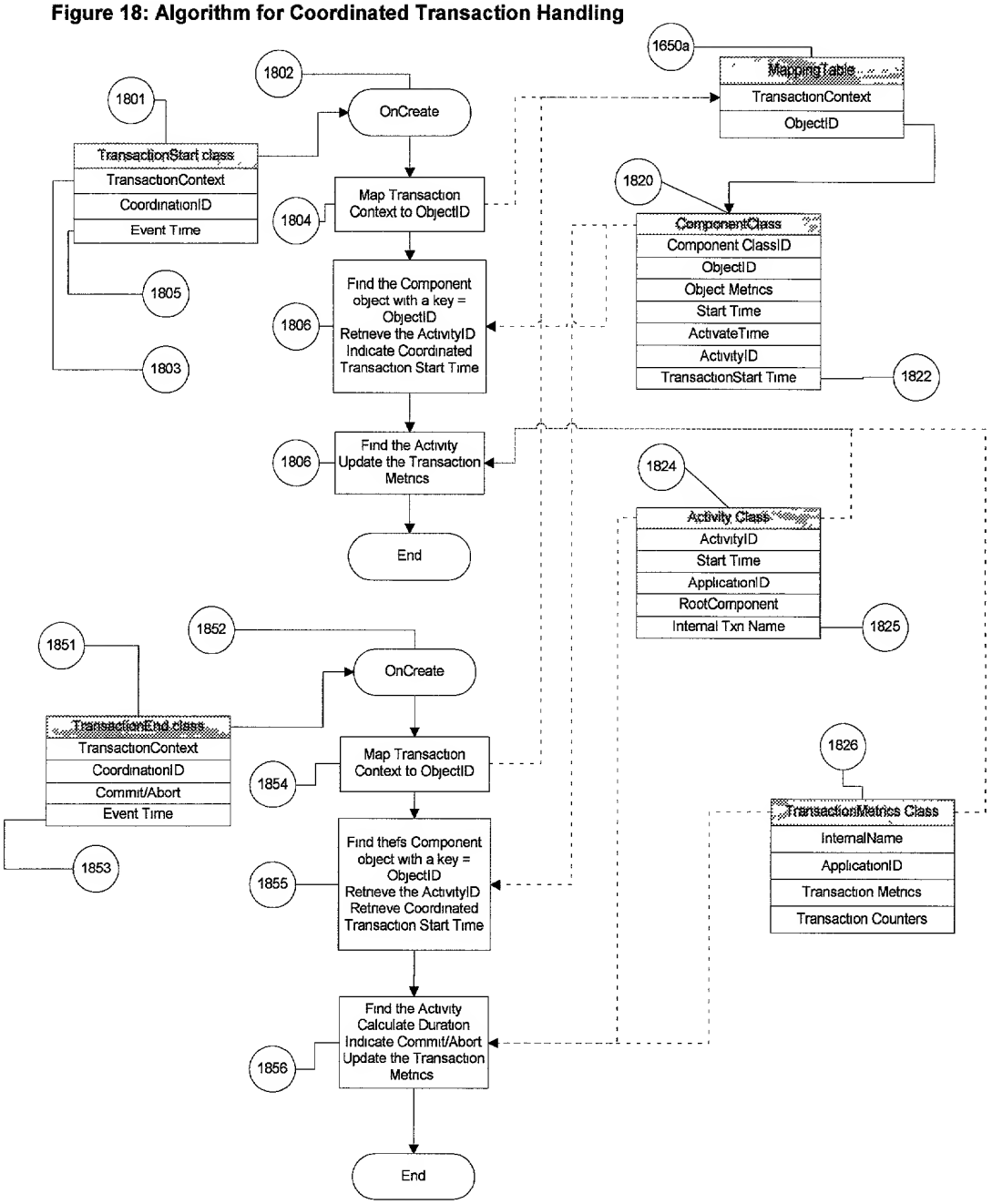


Figure 19: Algorithm for Handling Method Return and Method Exception

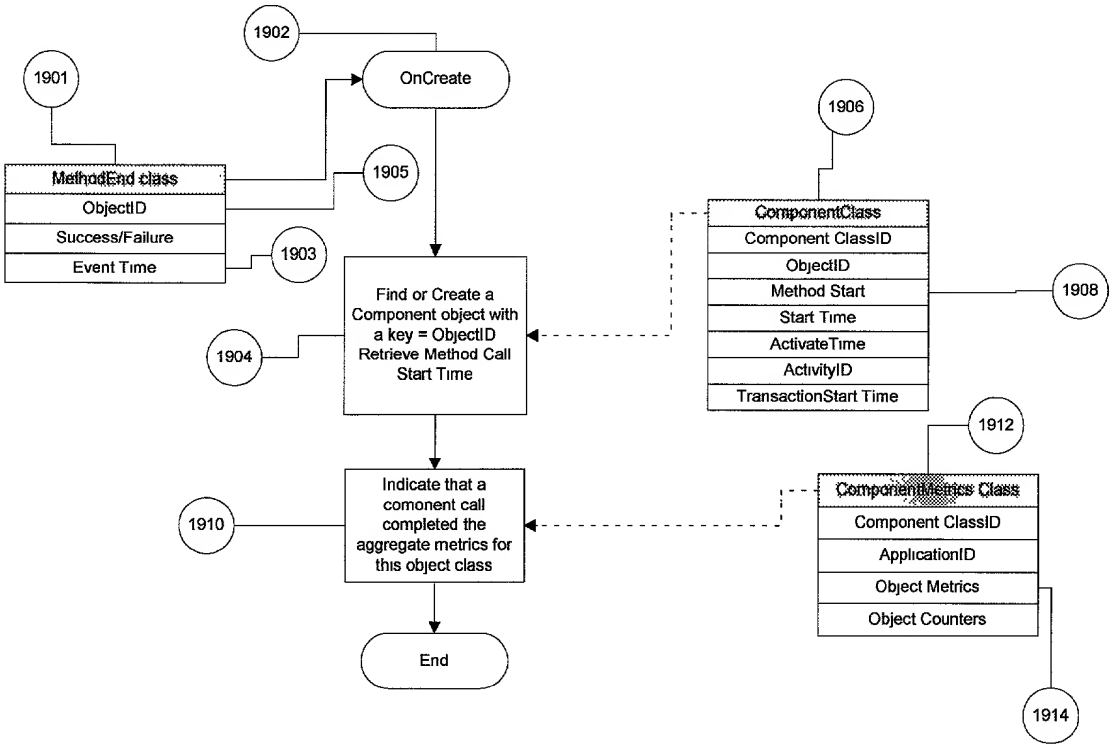


Figure 20: Algorithm for Handling Object Deactivation

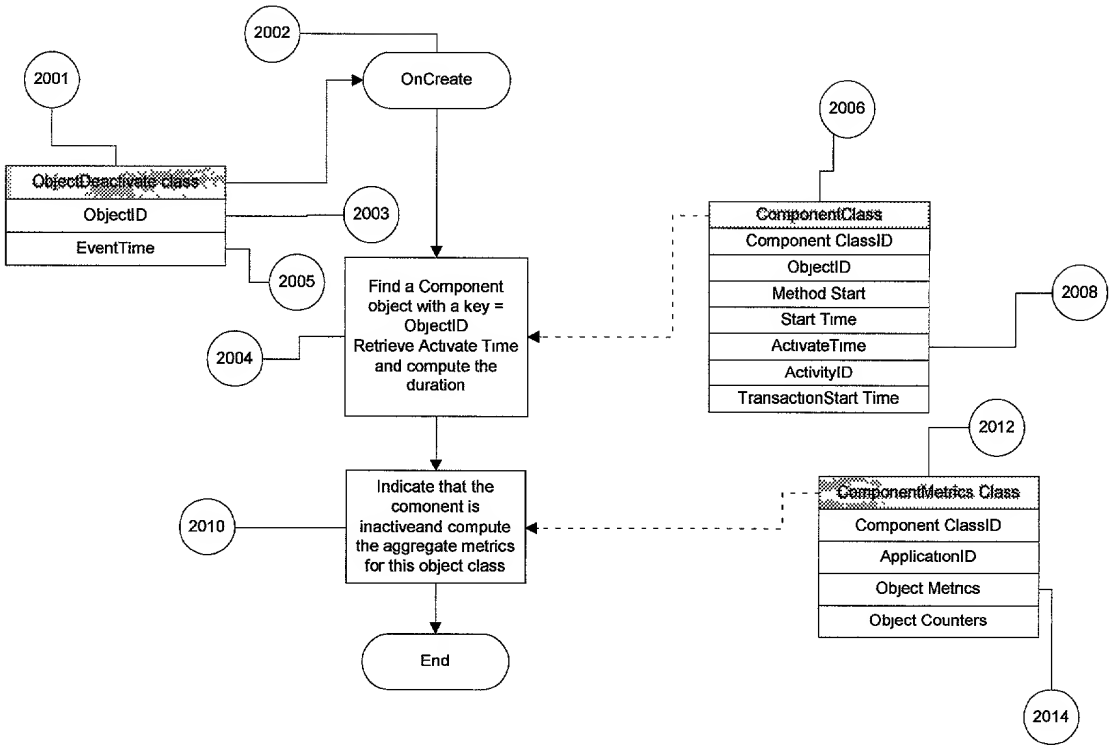


Figure 21: Algorithm for Handling Object Destruction

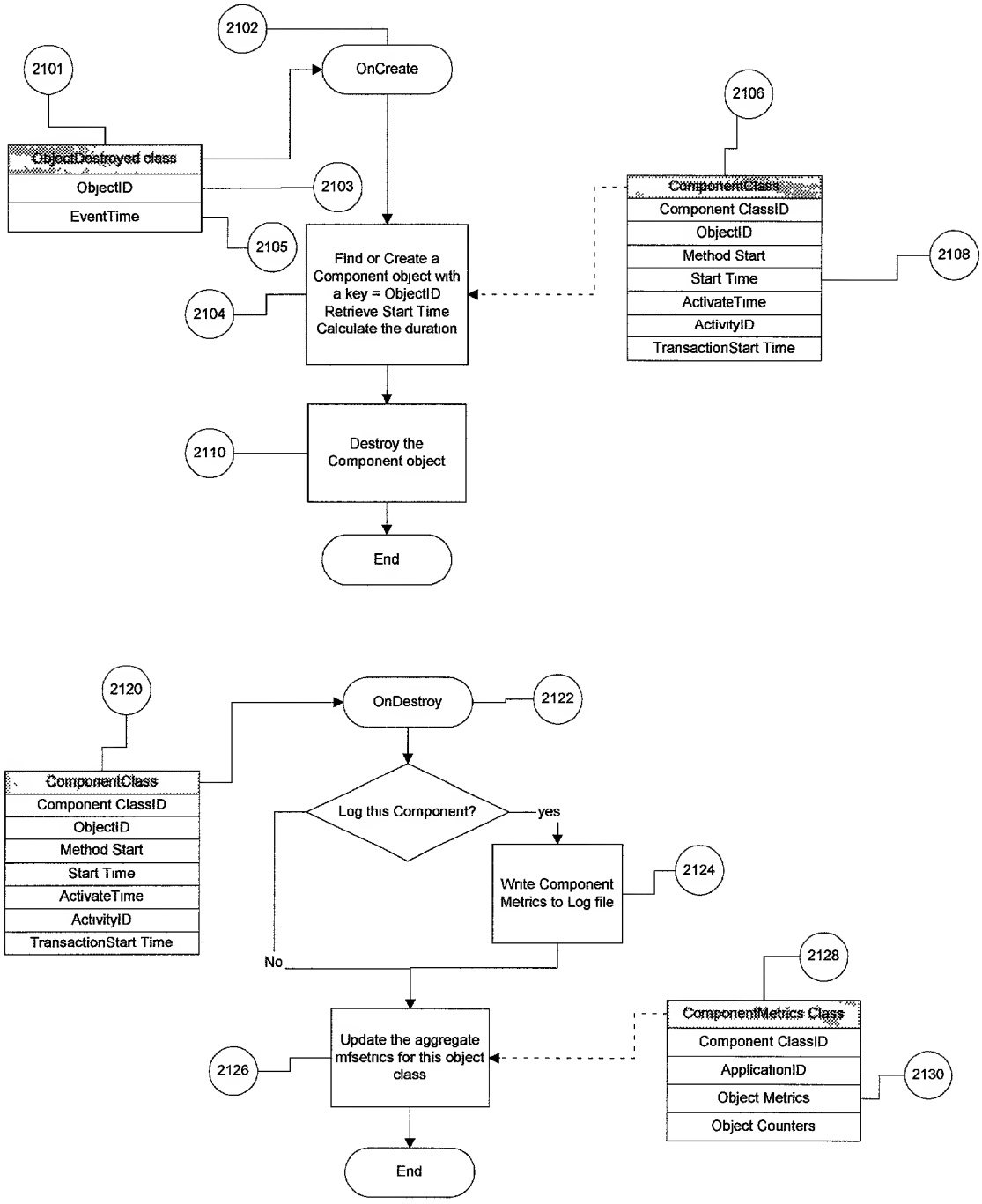


Figure 22: Algorithm for Application Process Termination

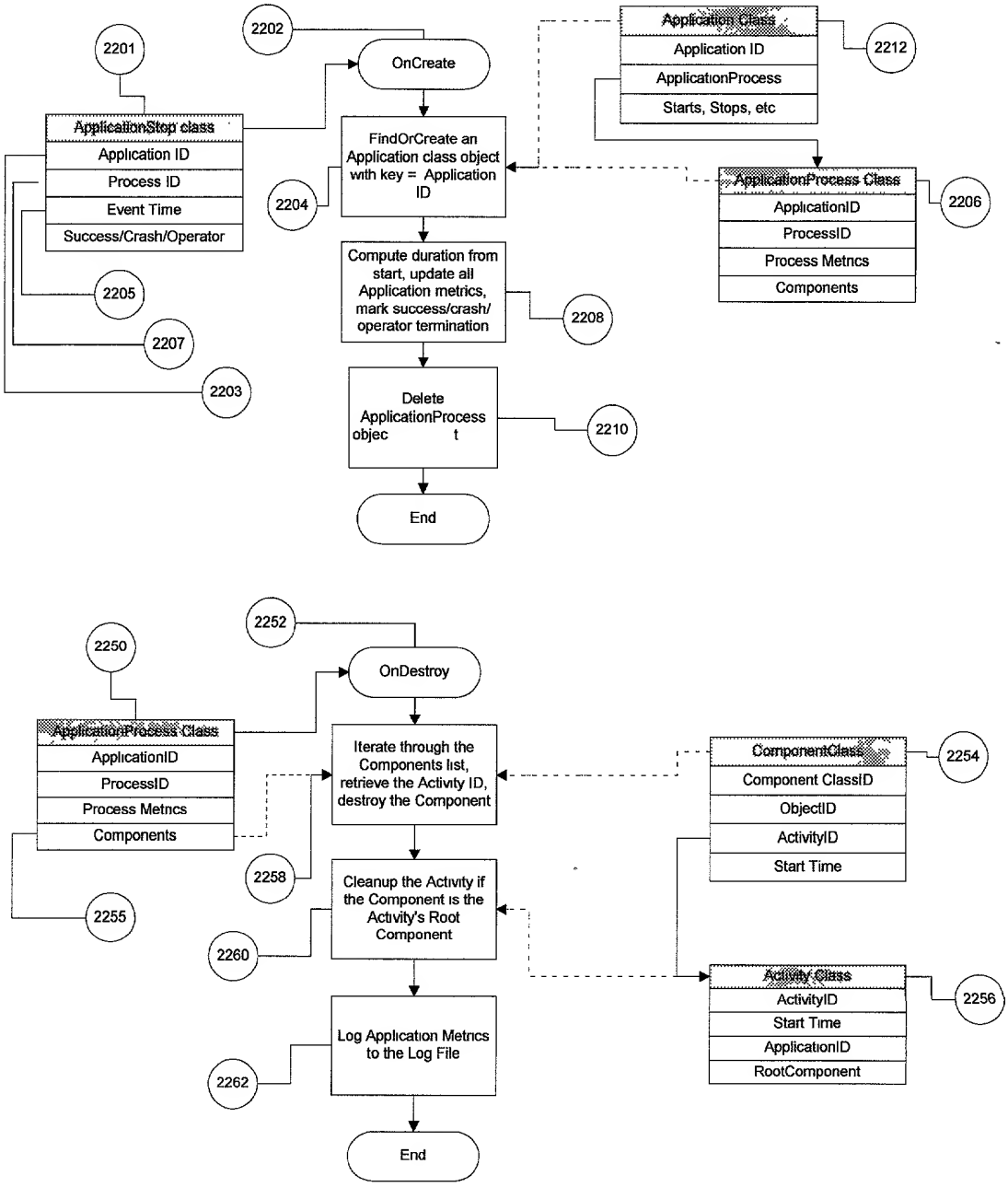


Figure 23: Algorithm for Aggregate and Throughput Object Metrics

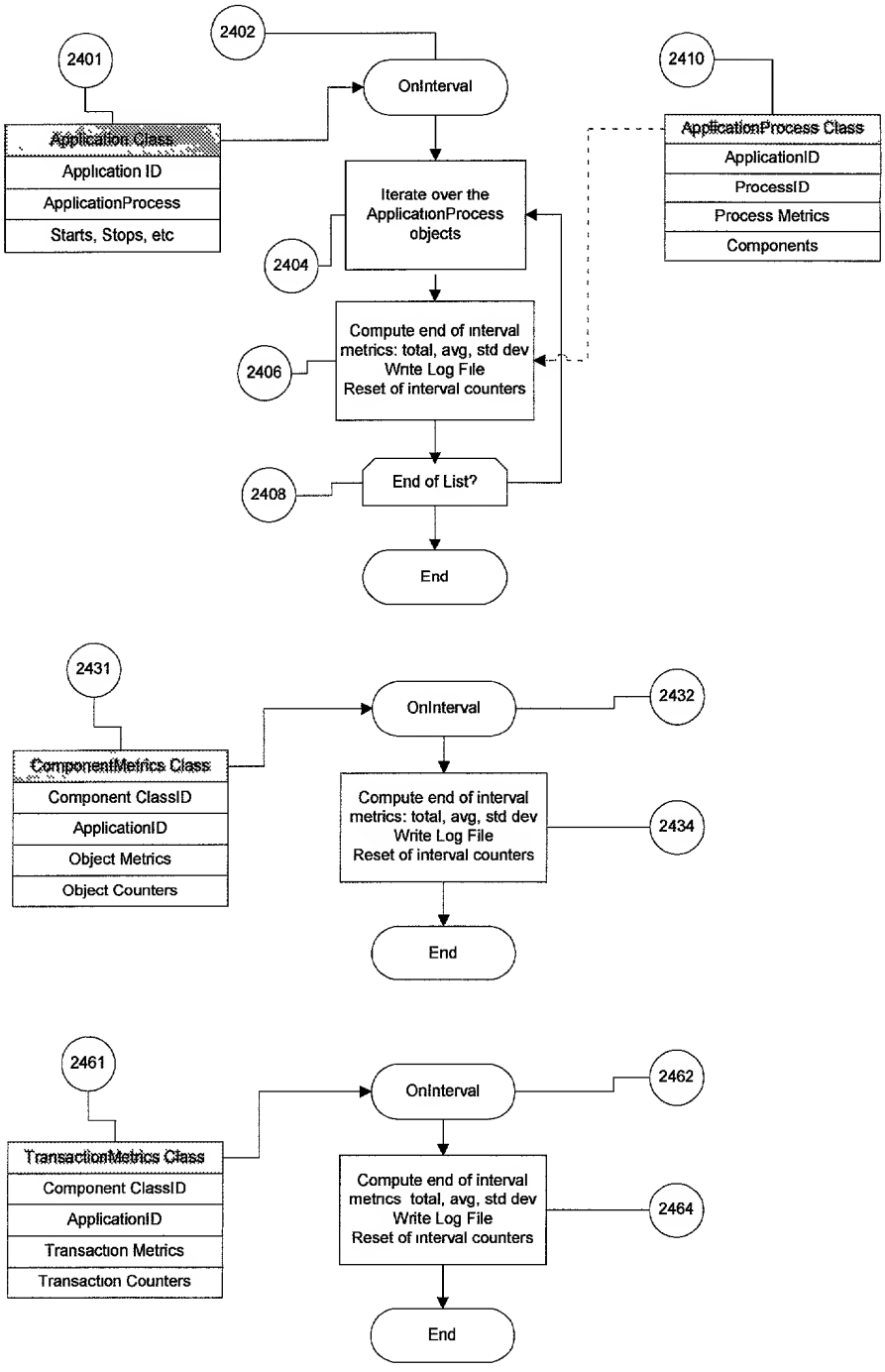


FIG. 23